

Model: 724-1710 Instruction Manual DC: 122014

## **Wireless Rain Station**

La Crosse Technology<sup>®</sup>, the world leader in atomic time and weather instruments, introduces a Wireless Rain Station featuring a self-emptying rain bucket, outdoor temperature and customizable rain alerts. Records rain history up to 365 days.



#### **Quick Setup**

- **Step 1:** Insert 2 "AA" LR6 batteries (not included) into the TX17T Temperature sensor. Observe the correct polarity.
- **Step 2:** Insert 2 "AA" LR6 batteries (not included) into the TX17R Rain sensor. Observe the correct polarity. (See instructions on page 3).
- **Step 3:** Insert 2 "AA" LR6 batteries (not included) into the 724-1710 rain station. Observe the correct polarity.

**Restart:** If dashes are displayed for outdoor temperature or rain after 3 minutes, remove the batteries from both sensors and the rain station, then press any button 20 times. After 15 minutes, start again at step 1.

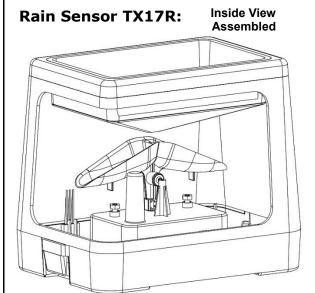
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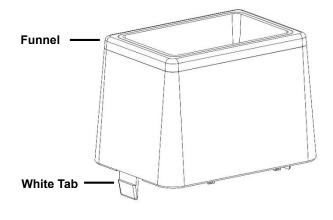
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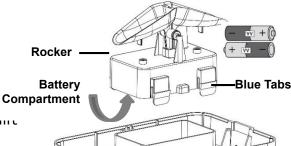
#### **Features**

- Rain Readings: current, 1 hour, 24 hours, 7 days, 1 month, and total since setup.
- Rainfall amount (in/mm)
- Animated cylinder graph corresponds with rain readings
- Signal strength icon for sensor transmission
- 12/24 hour time (manual setting)
- Calendar: day/month/date
- Indoor temperature (°F/°C)
- Outdoor temperature (°F/°C)
- Time alarm with snooze
- Low battery icon for station
- Low battery icon for sensors
- Customizable rain alerts (with icon)
- Saves up to 365 days of rainfall records
- Day display (English/Spanish/French)

#### **Install batteries in the Rain Station and Sensors**







- 1. Press the white tabs on each end of the rain sensor and income off funnel portion.
- 2. The battery compartment is under the rocker. Firmly squeeze all four blue tabs and lift battery compartment off of base and turn upside down.
- 3. Insert 2 "AA" Alkaline batteries into the TX17R rain sensor.
- 4. Position the battery compartment over base and press down so all four blue tabs lock in place.
- 5. Match the UP arrow on the front of the blue base and the DOWN arrow on the front of the white funnel portion.

**Note:** It is important to match up the arrows as the rocker is offset by the antenna; the funnel needs to center over the rocker.

6. Press the funnel portion onto the base until the white tabs lock back into place.

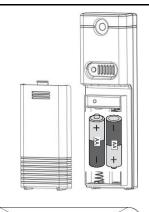
Base

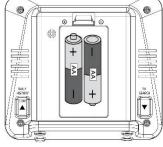
#### **TX17T Temperature Sensor:**

- 1. Insert 2 *new* AA batteries (not included) into the TX17T outdoor temperature sensor. Observe the correct polarity.
- 2. The red LED will flash during transmission.

#### **724-1710 Rain Station:**

- 1. Insert 2 *new* AA batteries (not included) into the 724-1710 Rain monitor. Observe the correct polarity.
- 2. Leave the rain monitor and sensors sit 5 -10 feet apart for 15 minutes to lock in both sensors.
- 3. Both the temperature and the rain sensor should appear on the rain station in the first minute.
- 4. Do not press buttons during the first 15 minutes.
- 5. You can tip the rocker of the rain sensor to simulate rain and receive a reading to the rain station.





#### **Sensor Mounting and Placement**

#### **Rain Sensor TX17R**

- Mount in an open area for a more accurate rain count.
- Install the Rain sensor on a level platform that is stationary.
- Insert two mounting screws (not included) through the holes in the base of the rain sensor.
- Ideally, the Rain sensor should be mounted at least 6 ft in the air and have a direct line of sight to the display.
- The rain sensor should be accessible to allow for periodic cleaning of debris or insects.
- The maximum wireless transmission range to the rain station is over 300 feet (91 meters) in open air, not including walls or floors.

#### **Temperature Sensor TX17T**

- Mount the Outdoor Sensor on a north-facing wall or in any well shaded area. Under an eave or deck rail is preferred.
- The maximum wireless transmission range to the rainstation is over 300 feet (91 meters) in open air, not including walls or floors.
- Be sure the outdoor sensor is mounted vertically. Place the transmitter at least six feet in the air to improve signal transmission.

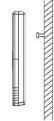
#### Option 1:

- Install one mounting screw (included) into a wall leaving approximately ½ of an inch (12.7mm) extended.
- Place the transmitter onto the screw, using the hanging hole on the backside.
- Gently pull the transmitter down to lock the screw into place.

#### Option 2:

- Insert the mounting screw through the front of the transmitter and into the wall.
- Tighten the screw to snug (do not over tighten).





#### **Rain Station Placement**

- Place the rain station at least six feet from radio interference such as PCs, radios or TV sets.
- Do not have wireless devices in the signal path between the sensors and the rain station.

#### **Buttons**

Front Buttons

TIME

ALARM

RAIN

HISTORY

SETTINGS

SNOOZE

ALERT

RAIN

Back Buttons

#### **SETTINGS Button (Time)**

Normal Mode: Hold to enter settings mode.

Settings Mode: Press to confirm a setting and move to next item.

#### SNOOZE Button (Alarm)

Normal Mode: Press to view Alarm time.

Alarm Mode: Hold to set Alarm time.

Press to arm/disarm alarm.

Alarm Ringing: Press to arm snooze feature for 10 minutes.

Snooze Mode: Press to exit snooze mode.

#### ALERT Button (Rain)

Normal Mode: Hold to enter rain alert mode.

Press to view rain alert

Alerts Mode: Press to arm/disarm rain alert

#### RAIN Button (History)

Normal Mode: Hold to enter settings mode.

Settings Mode: Press to confirm a setting and move to next item.

#### ▲ Button (Daily History, Clear)

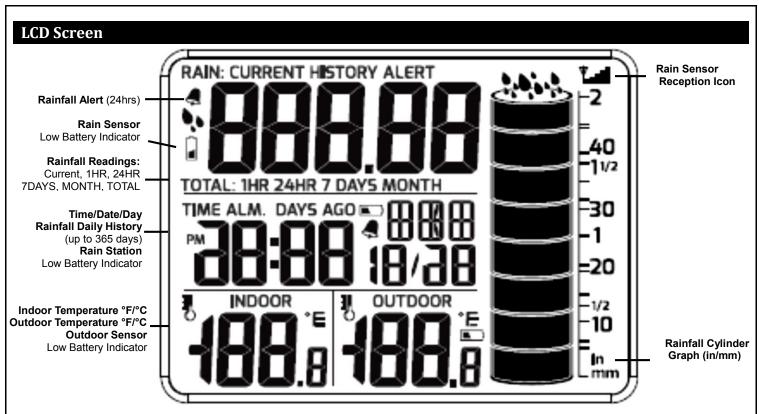
Normal Mode: Hold to enter settings mode.

Settings Mode: Press to confirm a setting and move to next item.

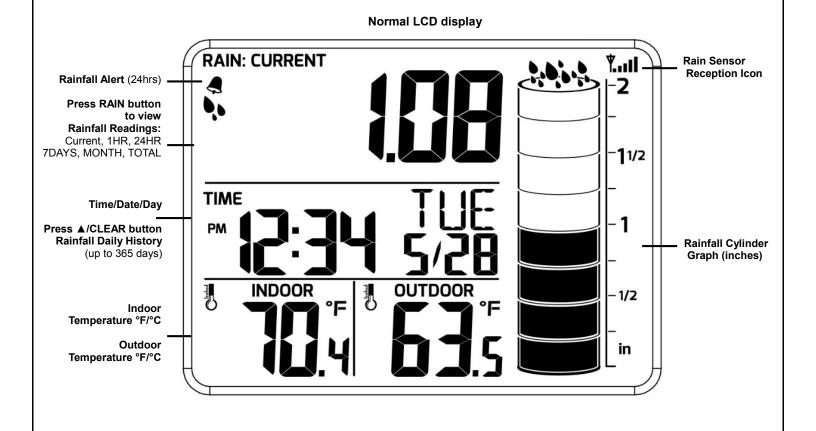
#### **▼** Button (TX Search)

Normal Mode: Hold to enter settings mode.

Settings Mode: Press to confirm a setting and move to next item.



Fully populated LCD for illustrative purposes



#### Set 12/24, Calendar, Time, Language, °F/°C, Rain Unit of Measure

- Hold the SETTINGS button to enter SETTINGS mode.
- Press the ▲/CLEAR and ▼ buttons (back) to adjust a value.
- Press the SETTINGS button to confirm and move to next item.



## **Settings order: 1.**12/24 hour, **2.**Year, **3.**Month, **4.**Date, **5.**Hour, **6.**Minute, **7.** Language (English/Spanish/French), **8.** °F/°C, **9.**mm/in (millimeters or inches for rain)

Note: The rain station will default out of set mode when no buttons are pressed for 20 seconds.

#### 12/24 Hour Time Format

The Time may be displayed in 12-hour or 24-hour format. Default is 12-hour time.

Note: When in 12-hour format AM or PM will show in front of the hour.

- 1. **12H** will flash in the time display.
- 2. Press and release the ▲/CLEAR and ▼ buttons to select 24-hour time.
- 3. Confirm with the **SETTINGS** button and move to Set Calendar.

#### Set Calendar (Year, Month, Date)

The date default of the weather station is 1. 1. 2014.

To set the calendar:

- 1. The **year** will flash.
- 2. Press and release the ▲/CLEAR and ▼ buttons to set the year.
- 3. Press the **SETTINGS** button again to confirm and to enter the month setting.
- 4. The **month** will flash.
- 5. Press and release the **△/CLEAR** and **▼** buttons to set the month.
- 6. Press the **SETTINGS** button again to confirm and enter the date setting.
- 7. The **date** will flash.
- 8. Press and release the **△/CLEAR** and **▼** buttons to set the date.
- 9. Confirm all calendar settings with the **SETTINGS** button to confirm and move to Set Time

**Note:** The day of the week will set automatically once the year, month and date are set.

#### Set Time (Hour, Minutes)

To set the time manually:

- 1. The **hour** digit will flash.
- 2. Press and release the ▲/CLEAR and ▼ buttons to select the hour.
- 3. Press and release the **SETTINGS** button to set the minutes.
- 4. The **minute's** digit will flash.
- 5. Press and release the **△/CLEAR** and **▼** buttons to select the minutes.
- 6. Confirm with the **SETTINGS** button and move to select Language.

# TIME PM PM

#### Language for Weekday Display

The day of the week can be displayed in English, French or Spanish.

- 1. **ENG** will flash in the time display.
- Press and release the ▲/CLEAR and ▼ buttons to select FRE (French) or SPA (Spanish) language.
- 3. Confirm with the **SETTINGS** button and move to select Fahrenheit or Celsius temperature display.

English	French	Spanish
ENG	FRE	SPA
MON	LUN	LUN
TUE	MAR	MAR
WEI	MER	MIE
THU	JEU	JUE
FRI	PEN	NIE
SAT	SAM	SAJ
SUN	IIM	IOM

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#### Fahrenheit/Celsius

- 1. **°F** will flash.
- 2. Press and release the ▼ or ▲ buttons to select Fahrenheit or Celsius.
- 3. Confirm with the **TIME SET** button and exit the program menu.



#### Rainfall Unit of Measure (inches/millimeters)

Rainfall measurement can be in inches or millimeters. The cylinder graph will change with the unit of measurement.

- 1. **In** (inches) will flash in the time display.
- 2. Press and release the ▲/CLEAR and ▼ buttons to select mm (millimeters).
- 3. Confirm with the **SETTINGS** button and exit.



#### **Set Time Alarm**

- 1. Press the **SNOOZE** button to view alarm time.
- 2. While in alarm mode, hold the **SNOOZE** button until rain station beeps, to enter alarm set mode.
- 3. The alarm hour digit will flash in the time display.
- 4. Press and release the **△/CLEAR** and **▼** buttons to select the hour.
- 5. Press and release the **SNOOZE** button to set the minutes.
- 6. The minute digits will flash.
- 7. Press and release the  $\blacktriangle$ /CLEAR and  $\blacktriangledown$  buttons to select the minutes.
- 8. Confirm with the **SNOOZE** button and exit.
- 9. The bell icon will show indicating the alarm is active.
- 10. The bell icon will flash when the alarm is sounding.

**Note:** The rain station will default out of alarm set mode if no buttons are pressed for 20 seconds.

#### Disarm Time Alarm

- The alarm automatically arms when the alarm is set.
- While viewing Alarm Time, press the **SNOOZE** button to disarm the time alarm.
- The bell icon will disappear.

#### Alarm Snooze

- When the alarm sounds, press the **SNOOZE** button to silence the alarm for 10 minutes.
- The snooze function may be repeated.
- Hold the **SNOOZE** to exit snooze mode.
- Press any other button to stop the alarm for one day.

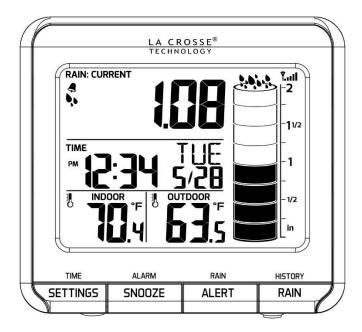
**Note:** This station has a crescendo alarm that will sound for 2 minutes, then shut off completely.

Alarm Bell Icon

#### **Rain Readings**

This detailed rain station offers rain readings with a corresponding cylinder graph.

Press and release the **RAIN** button to view different rain readings in the Rain Window:



- **CURRENT:** This measures from the start of rainfall until there is no rain accumulation for 30 minutes. The display will reset to zero when no rain has fallen for 30 minutes.
- 1 HR: The rainfall accumulated in the last 1-hour increment. Resets to zero at the top of each hour.

**Example:** If rain didn't start until5:50, then 5:50 to 5:59 is considered within the 5:00 to 6:00 hour rain increment. The data from 6:00 to 7:00 will be the next hour.

- 24 HR: Based on the past 24 1-hour increments. This is a running total that changes hourly.
- **7 DAYS**: Based on the last 7 24-hour readings. This is not a subject to the calendar. Be sure time and date are set.
- MONTH: Total rainfall from the first day of the month to last day of the month.
- **TOTAL:** Total rainfall since powered on or reset.

**Note:** As time passes without rain, the 1 hour, 24 hour, and 7 day rain totals will count down to zero.

#### **Clear Current Rainfall Readings**

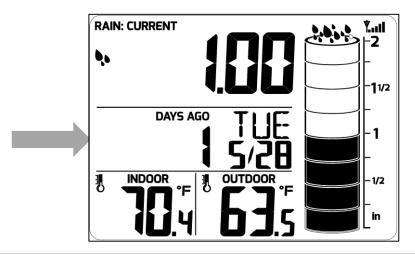
- 1. Press the **RAIN** button to select the value you wish to clear.
- 2. Hold the ▲/CLEAR button (on back) to clear a value.
- 3. Each value will need to be cleared individually.
- 4. Clearing the current values will not change the Days Ago records.

#### Rainfall Daily History Records (up to 365 days)

View rainfall history by toggling back one day at a time or select a date to view.

#### History Records One Day at a Time

- 1. Press the ▲/CLEAR button to view the rain history when DAYS AGO heading and the date appear.
- 2. Press the ▲/CLEAR button repeatedly, to scroll back one day at a time to view the rainfall daily record (365 days of record history maximum)

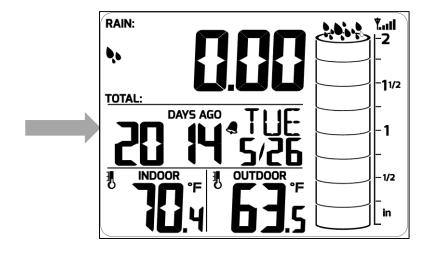


#### History Records Date Search

- Press the ▲/CLEAR button to view the rain history when DAYS AGO heading and the date appear.
- 2. In DAYS AGO mode, hold the ▲/CLEAR button until the rain station beeps. The Year will flash.
- 3. Press the ▲/CLEAR and ▼buttons to select the Year, Month and Date to view the rainfall.
- 4. Press **SETTINGS** button to confirm each setting.

#### Settings order: 1. Year2. Month3. Date

If no buttons are pressed for 20 seconds, the rain station will default to normal mode.



#### **Clear Rainfall Daily History Records**

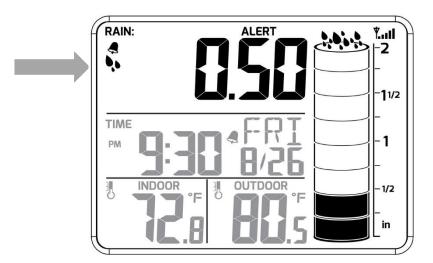
The 365 day rain history may remain during a battery change to the rain station. The Current, 1 hour, 24 hour, 7 days, month and total rain will be erased.

To clear these records, after inserting batteries hold the ▲/CLEAR and ▼buttons together.

#### Rainfall Alert (24 hour)

The rain station offers a programmable 24 hour rainfall alert.

- 1. Press the **ALERT** button to enter Rain Alert Mode.
- 2. In Alert mode, hold the **ALERT** button until the rain station beeps, to enter set mode, for the 24 hour rainfall alert.
- 3. Press the **△/CLEAR** and **▼**buttons to adjust the alert value.
- 4. Press the **ALERT** button to confirm and exit alert mode.
- 5. The rainfall alert is automatically armed when set.



#### Arm/Disarm 24 hour Rainfall Alert

- Press the **ALERT** button to enter Rain Alert Mode.
- In alert mode, press and release the **ALERT** button to arm or disarm the alert.
- The alert bell icon will show when armed.
- When the alert value is reached, the alarm will beep for 5 seconds, then once each minute.



Press any button to stop the alert from sounding.

#### **Search for Rainfall Sensor**

- Hold the RAIN button for 5 seconds to search for the rain sensor.
- The strength signal icon will animate until the sensor signal is received or for 3 minutes if no signal is available.



**Note:** The Time Alarm has priority over RF (radio frequency) reception, if alarm sounding is set for during a search.

#### **Search for Temperature Sensor**

Hold the ▼button for 5 seconds to search for the outdoor temperature sensor.

**Note:** The Time Alarm has priority over RF (radio frequency) reception, if alarm sounding is set for during a search.

#### **Low Battery Icons**

A low battery icon displayed indicates low battery for the rain station, rain sensor , or temperature sensor.

- If the icon is displayed in the Outdoor Temperature section, replace batteries in the temperature sensor.
- If the icon is displayed in the Rain section, replace batteries in the rain sensor.
- If the icon is displayed in the Date section, replace batteries in the wireless rain station.





Specifications	
Indoor	
Temperature Range:	+14°F to +122°F (-10°C to 50°C)
Outdoor	
Temperature Range:	-40°F to 148°F (-40°C to 70°C)
Distance:	Over 300 ft. (91 meters) RF 915MHz (open air)
Rain	
Range:	Up to 99.99 inches (999.9 mm)
Distance	Over 300 ft. (91 meters) RF 915MHz (open air)
Power	
Rain Station:	2-"AA", IEC, LR6 batteries (not included)
TX17T Outdoor Sensor:	2-"AA", IEC, LR6 batteries (not included)
TX17R Rain Sensor:	2-"AA", IEC, LR6 batteries (not included)
Battery Life	
Rain Station:	Battery life is up to12 months when using reputable battery brands
TX17T Outdoor Sensor:	Battery life is up to12 months when using reputable battery brands for both Alkaline and Lithium batteries
TX17R Rain Sensor:	Battery life is up to12 months when using reputable battery brands for both Alkaline and Lithium batteries
Dimensions	
Rain Station:	4.27"L x 1.48"W x 3.88"H (108 x 38 x 99 mm)
TX17T Outdoor Sensor:	1.57"L x 0.79"W x 5.12"H (40 x 20 x 130mm)
TX17R Rain Sensor:	6.00"L x 5.10"W x 4.21"H (152 x 130 x 107mm)

#### **Care and Maintenance**

- Do not mix old and new batteries
- Do not mix Alkaline, Standard, Lithium or Rechargeable Batteries
- Always purchase the correct size and grade of battery most suitable for the intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+and -).
- Remove batteries from equipment with is not to be used for an extended period of time.
- Remove used batteries promptly.
- Do not expose to extreme temperature, vibration or shock.
- Clean with a soft damp cloth. Do not use solvents or scouring agents.
- The product is not a toy. Keep it out of reach of children.
- The product is not to be used for medical purpose or for public information. It is intended for home use only.
- The specs of this product may change without prior notice.
- Improper use or unauthorized opening of housing voids warranty.
- If the product is not working properly, change the batteries.

#### **Warranty Information**

La Crosse Technology, Ltd. provides a 1-year limited time warranty (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.

Before returning a product, please contact our friendly customer support with questions or visit our online help (manuals and FAQS):

**Phone:** 1-608-782-1610

**Online Product Support:** www.lacrossetechnology.com/support

#### **Product Registration:**

www.lacrossetechnology.com/support/register

#### **View full warranty details online at:**

www.lacrossetechnology.com/warranty info.pdf

#### **Warranty Address:**

La Crosse Technology, Ltd 2830 S. 26<sup>th</sup> St. La Crosse, WI 54601

#### **Protected under U.S. Patents:**

5,978,738 | 6,076,044 |RE43903



#### **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device must not be co-located or operating in conjunction with any other antenna or transmitter. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

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